

Appl. No. 10/064,595
Amdt. dated August 1, 2006
Reply to Office action of May 19, 2006

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (currently amended) A method for controlling a network connection of the terminal in
5 a wireless network system, the terminal capable of wirelessly transmitting and
receiving data, the wireless network system comprising a plurality of wireless
networks, the different wireless networks having different identities capable of being
transmitted wirelessly by each wireless network, the terminal comprising:
10 a plurality of distinct sorting pointers, each distinct sorting pointer
representing a unique priority;
a network database for recording a plurality of predetermined identities,
wherein the network database has a plurality of key IDs
stored in the database with each of key IDs corresponding to a
predetermined identity;
15 a plurality of configuration tables, each configuration table for corresponding
one predetermined identity to one unique sorting pointer, and each
configuration table having at least a unique predetermined identity which
corresponds to a sorting pointer; and
a status pointer for representing an operational location and time;
20 the method comprising:
receiving identities of the plurality of wireless networks via wireless
transmission;
choosing a configuration table from the plurality of configuration tables
according to the status pointer;
25 comparing the predetermined identity of the chosen configuration table with
the identities received, and if any of the plurality of identities received
matches the predetermined identity, then choosing an identity according

Appl. No. 10/064,595
Amdt. dated August 1, 2006
Reply to Office action of May 19, 2006

to the sorting pointer corresponding to the status pointer; and
wirelessly connecting to the wireless network corresponding to the chosen
identity, wherein a certification program is first processed, then
the data being uploaded or downloaded between the terminal
5 and the wireless network is encrypted according to the key ID
which is corresponding to the wireless identity, and data being
uploaded or downloaded between the terminal and the
wireless network is encrypted according to the key ID
corresponding to the network identity.

10

2. (original) The method of claim 1 wherein when choosing an identity according to the
matched sorting pointer corresponding to the predetermined identity, the
predetermined identities matching the chosen identity have sorting pointers with
higher priorities.

15

3-4. (cancelled).

5. (original) The method of claim 1 wherein each wireless network has at least an access
point, and the identity of each wireless network is transmitted by the access point of
20 each wireless network.

20

6. (original) The method of claim 1 wherein the terminal is a notebook computer.

7. (cancelled).

25

8. (original) The method of claim 1 wherein each of the wireless networks is capable of
continuously sending out a beacon signal comprising a corresponding identity of the
wireless network, and the terminal is capable of receiving the plurality of identities

Appl. No. 10/064,595
Amdt. dated August 1, 2006
Reply to Office action of May 19, 2006

corresponding to the wireless networks.

9. (original) The method of claim 1 further comprising:

5 choosing an identity via a predetermined method when comparing the
 predetermined identities of the chosen configuration table to the
 identities received from the terminal results in no received identities
 being identical to any of the predetermined identities.

10 10. (original) The method of claim 9 wherein the predetermined method chooses an
 identity randomly.

11. (original) The method of claim 9 further comprising:

 wirelessly connecting to the wireless network which is corresponding to the
 chosen identity; and
15 15 updating the chosen configuration table according to the chosen identity.

12. (original) The method of claim 11 further comprising:

 updating all configuration tables according to the chosen identities.

20 13. (previously presented) The method of claim 1 wherein each configuration table
 corresponds to a unique list of prioritized user preferences for a specific operational
 time and physical location of the terminal.

25 14. (new) A method for controlling a network connection of the terminal in a wireless
 network system, the terminal capable of wirelessly transmitting and receiving data,
 the wireless network system comprising a plurality of wireless networks, the
 different wireless networks having different identities capable of being transmitted
 wirelessly by each wireless network, and the plurality of wireless networks being

Appl. No. 10/064,595
Amdt. dated August 1, 2006
Reply to Office action of May 19, 2006

capable of responding to a probe signal by wirelessly transmitting the identity corresponding to the wireless network, the terminal comprising:

- a plurality of distinct sorting pointers, each distinct sorting pointer representing a unique priority;
 - 5 a network database for recording a plurality of predetermined identities;
 - a plurality of configuration tables, each configuration table for corresponding one predetermined identity to one unique sorting pointer, and each configuration table having at least a unique predetermined identity which corresponds to a sorting pointer; and
 - 10 a status pointer for representing an operational location and time;
- the method comprising:
- sending out a probe signal through the terminal;
 - having the plurality of wireless networks respond to their own corresponding identities via wireless transmission to make
 - 15 the terminal capable of receiving the identities corresponding to the plurality of wireless networks;
 - choosing a configuration table from the plurality of configuration tables according to the status pointer;
 - comparing the predetermined identity of the chosen configuration table with
 - 20 the identities received, and if any of the plurality of identities received matches the predetermined identity, then choosing an identity according to the sorting pointer corresponding to the status pointer; and
 - wirelessly connecting to the wireless network corresponding to the chosen identity.

25

15. (new) The method of claim 14 wherein when choosing an identity according to the matched sorting pointer corresponding to the predetermined identity, the predetermined identities matching the chosen identity have sorting pointers with

Appl. No. 10/064,595
Amdt. dated August 1, 2006
Reply to Office action of May 19, 2006

higher priorities.

16. (new) The method of claim 14 wherein each wireless network has at least an access point, and the identity of each wireless network is transmitted by the access point of
5 each wireless network.

17. (new) The method of claim 14 wherein the terminal is a notebook computer.

18. (new) The method of claim 14 wherein each of the wireless networks is capable of
10 continuously sending out a beacon signal comprising a corresponding identity of the wireless network, and the terminal is capable of receiving the plurality of identities corresponding to the wireless networks.

19. (new) The method of claim 14 further comprising:
15 choosing an identity via a predetermined method when comparing the predetermined identities of the chosen configuration table to the identities received from the terminal results in no received identities being identical to any of the predetermined identities.

20. (new) The method of claim 19 wherein the predetermined method chooses an identity
20 randomly.

21. (new) The method of claim 19 further comprising:
25 wirelessly connecting to the wireless network which is corresponding to the chosen identity; and
updating the chosen configuration table according to the chosen identity.

22. (new) The method of claim 21 further comprising:

Appl. No. 10/064,595
Amdt. dated August 1, 2006
Reply to Office action of May 19, 2006

updating all configuration tables according to the chosen identities.

23. (new) The method of claim 14 wherein each configuration table corresponds to a
unique list of prioritized user preferences for a specific operational time and
5 physical location of the terminal.